

**National Sun Yat-Sen University**  
**ASSEMBLY LANGUAGE AND MICROCOMPUTER**  
**Program #1**  
**Due 11:59 PM Nov 25 2021**

1. <**Programming Problem I**> Write an ARM assembly code to implement a reverse program which can print out the input string in reverse order to the screen. In addition, the English letters in the string have to be converted to lowercase. For example, when you execute reverse program as follows:

**arm-none-eabi-run reverse "It is Tom's apple."**

Then the screen should show the following results:

**reversed result: .elppa s'mot si ti**

Note:

- (a) Your assembly code should follow the APCS rules described in the textbook.
- (b) The submission of your homework should follow the method announced by TA before the deadline. Homework submitted after the deadline will not receive any score.